

METHODS: Clinical data from 79 PD patients and data from the literature regarding PD-related costs, clinical progression and life expectancy were used to develop a disease progression model according to the Hoehn and Yahr stage of PD (HY). The model was designed to model both protective and symptomatic treatment effects. Outcomes were based on a consecutive series of 14 PD patients treated with intrastriatal NT of human embryonic mesencephalic tissue, and followed for 2–10 years thereafter. Since the majority of patients receiving NT had early onset PD and were in HY 3–4, the cost-effectiveness of NT was evaluated for patients belonging to these categories. Costs and quality adjusted life years (QALY) were calculated for a period of 25 years and discounted at 3%. The calculations were made in Euro (€) (2002 prices). A sensitivity analysis was performed where scenarios regarding treatment effect, time horizon, discount rate, and the procedure cost were altered. **RESULTS:** Patients with a preoperative HY state of 3 and 4 improved 0.552 and 0.736 HY stages following NT, which is equivalent to 4.9 and 6.6 years in less advanced PD stages, respectively. The cost of NT, including expected costs of complications, was €36,000. The incremental cost-effectiveness ratio of NT compared to standard treatment was €11,400 for patients in HY 3 and cost saving in HY 4 patients. **CONCLUSIONS:** According to the assumptions made in the model, NT is cost-effective compared to standard treatment in Sweden. The main conclusions were insensitive to the assumptions made in the sensitivity analysis.

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ECONOMIC EVALUATION OF DATSCAN IN THE DIAGNOSIS OF PARKINSONISM

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OBJECTIVES: Parkinsonian syndromes (PS) can be difficult to diagnose clinically, the most common condition misdiagnosed as PS being essential tremor (ET). DaTSCAN (123I-FP-CIT) SPECT imaging accurately differentiates PS with dopaminergic deficit from ET in patients with uncertain clinical diagnosis (sensitivity 95%, specificity 93%). This study aimed to assess the economic value of using DaTSCAN to the Belgian Health care system. **METHODS:** A Markov model was developed to simulate a cohort of patients with clinically uncertain PS managed over 5 years 1) without DaTSCAN (treatment based on clinical judgement), or 2) all patients receiving DaTSCAN at the outset. Health states were defined by type of therapy (PS first-line, PS second-line, ET, none) and underlying condition (PS, ET). The model estimated time on appropriate therapy (PS therapy for underlying PS, ET therapy for underlying ET) and patient management costs. Model inputs were from published studies, with treatment patterns/resource use from a

Delphi panel of 13 Belgian physicians. 53% cohort members were assumed to have true PS. Costs were from official sources, the test cost (agent plus administration) being €900. **RESULTS:** Without DaTSCAN, 41% of cohort members were treated appropriately at the outset, rising to 75% at 5 years. Using DaTSCAN, 94% of patients were treated appropriately at the outset, declining to 77% at 5 years. DaTSCAN use generated an incremental 1.40 “adequately treated years” at a net cost of €140 per patient. This result was sensitive to the underlying prevalence of PS, but relatively robust to variations in other model parameters, such as rates of adverse events and withdrawal from therapy. **CONCLUSION:** Treatment of patients with clinically uncertain PS based on DaTSCAN rather than clinical judgement may be considered to be an economically favourable strategy. An increase in time on appropriate therapy is achieved at modest extra cost to the Health care system.

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SOCIO-ECONOMIC IMPACT OF EPILEPSY ON PARENTS: THE TRILOGIE STUDY

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The management of a chronic disease must integrate the needs induced by the disease on the patient's surroundings. **OBJECTIVE:** The TRILOGIE study was initiated by a group of neurological and neuro-paediatric experts and the Ligue Française Contre l'Epilepsie to study the Child-Parent-Epilepsy interaction. The objective is to assess the socio-economic consequences of epilepsy on the daily life of the parents of a child diagnosed as epileptic for more than six months. **METHODS:** Self-administered questionnaires, created on the basis of interviews with families of epileptic children, were sent to paediatricians and neuro-paediatricians taking care of epileptic children, as well as to members of patients' associations. They then distributed them to the parents of the children concerned. **RESULTS:** The results concerned a population of 668 parents of epileptic children. Eight domains were explored as part of the study. The management of the disease is often difficult with more than one hospitalisation (70% of the children). The consequences for the children are serious difficulties at school (40%) and a greater need for care (63%). Medical and/or psychological help is therefore often needed by the parents (38%). Epilepsy is source of conflict for 43% of the couples. The major economic impact of the disease is due to partial reimbursement of nursing costs, extra costs of care and schooling and loss of revenue due to one parent giving up full time work. **CONCLUSIONS:** TRILOGIE underlines the parent's need for information concerning: the current and future treatment of the disease, the possibilities of socialisation and the concrete daily help.